

PTO/SB/08A (08-03)

Substitute for form 1449A/PTO		Complete if Known			
		Application Number	10/632,482		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	August 1, 2003		
		First Named Inventor	PHAN, LOC X.		
		Art Unit	3732d		
		Examiner Name	Unassigned		
Sheet	1	of	10	Attorney Docket Number	018563-001130US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ³ (if known)			
C/O	AA	2,467,432	04-19-1949	Kesling	
	AB	3,660,900	05-09-1972	Andrews	
	AC	3,860,803	01-14-1975	Levine	
	AD	3,916,526	11-04-1975	Schudy	
	AE	3,950,851	04-20-1976	Bergersen	
	AF	4,014,096	03-29-1977	Dellinger	
	AG	4,195,046	03-25-1980	Kesling	
	AH	4,324,546	04-13-1982	Heitlinger et al.	
	AI	4,348,178	09-07-1982	Kürz.	
	AJ	4,478,580	10-23-1984	Barut	
	AK	4,504,225	03-12-1985	Yoshii	
	AL	4,505,673	03-19-1985	Yoshii	
	AM	4,575,805	03-11-1986	Moermann, et al.	
	AN	4,611,288	09-09-1986	Duret et al.	
	AO	4,656,860	04-14-1987	Orthuber et al.	
	AP	4,663,720	05-05-1987	Duret et al.	
	AQ	4,742,464	05-03-1988	Duret et al.	
	AR	4,755,139	07-05-1988	Abbatte et al.	
	AS	4,763,791	08-16-1988	Halverson et al.	
	AT	4,793,803	12-27-1988	Martz	
	AU	4,798,534	01-17-1989	Breads	
	AV	4,837,732	06-06-1989	Brandestini et al.	
	AW	4,850,864	07-25-1989	Diamond	
	AX	4,856,991	08-15-1989	Breads et al.	
	AY	4,936,862	06-26-1990	Walker et al.	
	AZ	4,937,928	07-03-1990	van der Zel	
	BA	4,964,770	10-23-1990	Steinbichler et al.	
	BB	4,975,052	12-04-1990	Spencer et al.	
	BC	5,011,405	04-30-1991	Lemchen	
BD	5,017,133	05-21-1991	Miura		
BE	5,027,281	06-25-1991	Rekow et al.		
BF	5,035,613	07-30-1991	Breads et al.		
BG	5,055,039	10-08-1991	Abbatte et al.		
BH	5,059,118	10-22-1991	Breads et al.		
BI	5,100,316	03-31-1992	Wildman		
BJ	5,121,333	06-09-1992	Riley et al.		
BK	5,128,870	07-07-1992	Erdman et al.		
BL	5,131,843	07-21-1992	Hilgers et al.		
BM	5,131,844	07-21-1992	Marinaccio et al.		
BN	5,139,419	08-18-1992	Andreiko et al.		
BO	5,184,306	02-02-1993	Erdman et al.		
Examiner Signature	Cary E O'Connor		Date Considered	3-9-05	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

60298143 v1

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete If Known		
			Application Number	10/632,482	
			Filing Date	August 1, 2003	
			First Named Inventor	PHAN, LOC X.	
			Art Unit	3732d	
Examiner Name	Unassigned				
Sheet	2	of	10	Attorney Docket Number	018563-001130US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
000	BP	5,186,623	02-16-1993	Breads et al.	
	BQ	5,257,203	10-26-1993	Riley et al.	
	BR	5,273,429	12-28-1993	Rekow et al.	
	BS	5,278,756	01-11-1994	Lemchen et al.	
	BT	5,338,198	08-16-1994	Wu et al.	
	BU	5,340,309	08-23-1994	Robertson	
	BV	5,342,202	08-23-1994	Deshayes	
	BW	5,368,478	11-29-1994	Andreiko et al.	
	BX	5,382,164	01-17-1995	Stern	
	BY	5,395,238	03-07-1995	Andreiko et al.	
	BZ	5,431,562	11-11-1995	Andreiko et al.	
	CA	5,440,496	08-08-1995	Andersson et al.	
	CB	5,447,432	09-05-1995	Andersson et al.	
	CC	5,452,219	09-19-1995	Dehoff et al.	
	CD	5,454,717	10-03-1995	Andreiko et al.	
	CE	5,458,600	10-10-1995	Andreiko et al.	
	CF	5,474,448	12-12-1995	Andreiko et al.	
	CG	5,518,397	05-21-1996	Andreiko et al.	
	CH	5,533,895	07-09-1996	Andreiko et al.	
	CI	5,542,842	08-06-1996	Andreiko et al.	
	CJ	5,549,476	08-27-1996	Stern	
	CK	5,587,912	12-24-1996	Andersson et al.	
	CL	5,605,459	02-25-1997	Kuroda et al.	
	CM	5,607,305	03-04-1997	Andersson et al.	
	CN	5,645,421	07-08-1997	Slootsky	
	CO	5,655,653	08-12-1997	Chester	
	CP	5,683,243	11-04-1997	Andreiko et al.	
	CQ	5,733,126	03-31-1998	Andersson et al.	
	CR	5,740,267	04-14-1998	Echerer et al.	
000	CS	5,975,893	11-02-1999	Chishti et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	CT	EP	091,876	A1	10-19-1983	Duret		<input type="checkbox"/>
	CU	EP	299,490	A2	01-18-1989	Steinbichler et al.		
	CV	EP	376,873	A2	07-04-1990	Shafir		
	CW	EP	490,848	B1	06-17-1992	Andersson et al.		
	CX	EP	541,500	A1	06-12-1998	Andersson et al.		

Examiner Signature	<i>Cay E O'Connor</i>	Date Considered	3-9-05
-----------------------	-----------------------	--------------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/632,482
				Filing Date	August 1, 2003
				First Named Inventor	PHAN, LOC X.
				Art Unit	3732d
Examiner Name	Unassigned				
Sheet	3	of	10	Attorney Docket Number	018563-001130US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	CY	EP	731,673	B1	09-18-1998	Andersson et al.		
	CZ	EP	774,933	B1	05-28-1997	Oden et al.		
	DA	FR	2,652,256	A1	03-29-1991	Jourda		<input type="checkbox"/>
	DB	FR	2,369,628	A1	06-02-1978	Suyehiro		<input type="checkbox"/>
	DC	WO	90/08,512	A1	08-09-1990	Lemcren		<input type="checkbox"/>
	DD	WO	91/04,713	A1	04-18-1991	Jourda et al.		<input type="checkbox"/>
	DE	WO	94/10,935	A1	05-26-1994	Andreiko et al.		<input type="checkbox"/>
	DF	WO	98/44,863	A1	10-15-1998	Andersson		<input type="checkbox"/>
CIX	DG	WO	98/58,596	A1	12-30-1998	Chishti et al.		<input type="checkbox"/>

Examiner Signature	<i>Casey E O'Connor</i>	Date Considered	3-9-05
-----------------------	-------------------------	--------------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known			
		Application Number	10/632,482		
		Filing Date	August 1, 2003		
		First Named Inventor	PHAN, LOC X.		
		Art Unit	3732		
		Examiner Name	Unassigned		
Sheet	4	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DH	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," JCO (July 1990), pp. 402-407.	
	DI	ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," <i>Optical Engineering</i> , Vol. 20(6) (1981), pp. 953-961.	
	DJ	ALTSCHULER et al., "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," <i>SPIE Imaging Applications for Automated Industrial Inspection and Assembly</i> , vol. 182 (1979), p. 187-191.	
	DK	ALTSCHULER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures," Program and Abstracts of Papers, Feb. 1975, <i>Journal of Dental Research</i> , Vol. 54, IADR Abstracts 1979, 2 pages total.	
	DL	ALTSCHULER, "3D Mapping of Maxillo-Facial Prosthesis," AADR Abstract #607, 1980, 2 pages total..	
	DM	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.	
	DN	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," <i>Acta Odontologica Scandinavica</i> , vol. 47 (1989), pp. 279-286.	
	DO	BAUMRIND et al., "A stereophotogrammetric system for the detection of prosthesis loosening in total hip arthroplasty, Applications of Human Biostereometrics (NATO)," <i>Proceedings of the Society of Photo-Optical Instrumentation Engineers</i> , Vol. 166, July 9-13, 1978, pp. 112-123.	
	DP	BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, <i>California Dental Association</i> , Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.	
	DQ	BAUMRIND et al., "Seminars in Orthodontics," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), p. 222.	
	DR	BAUMRIND, "A System for Craniofacial Mapping Through the Integration of Data from Stereo X-Ray Films and Stereo Photographs," An invited paper submitted to the 1975 American Society of Photogram. Symposium on Close-Range Photogram. Systems, University of Ill., Aug. 26-30, 1975, pp. 1-25.	
	DS	BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 223-232.	
	DT	BEGOLE et al., "A Computer System for the Analysis of Dental Casts," <i>The Angle Orthodontist</i> , Vol. 51 No. 3 (July 1981), pp. 253-259.	
	DU	BERNARD et al., "Computerized diagnosis in Orthodontics for Epidemiological Studies" (progress report), Abstracts of Papers, <i>Journal of Dental Research</i> , Vol. 71, Special Issue March 1-14, 1992, pp. 28-36.	
	DV	BHATIA et al., "A Computer-Aided Design for Orthognathic Surgery," <i>British Journal of Oral and Maxillofacial Surgery</i> , Vol. 22 (1984), pp. 237-253.	
	DW	BIGGERSTAFF et al., "Computerized analysis of occlusion in the postcanine dentition," <i>American Journal of Orthodontics</i> , Vol. 61, No. 3 (Mar. 1972), pp. 245-254.	

Examiner Signature	<i>Cathy E. O'Connor</i>	Date Considered	3-9-05
--------------------	--------------------------	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/632,482		
		Filing Date	August 1, 2003		
		First Named Inventor	PHAN, LOC X.		
		Art Unit	3732		
		Examiner Name	Unassigned		
Sheet	5	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DX	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.	
	DY	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, 1 page total.	
	DZ	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter, Abstract of Papers, 1985, Dept. of Children's Dentistry and Orthodontics, <i>J Dent Res</i> , March 1986, pp. 428-431.	
	EA	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.	
	EB	BURSTONE et al., "Precision adjustment of the transpalatal lingual arch: Computer arch form predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.	
	EC	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.	
	ED	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.	
	EE	CHIAPPONE, "Constructing the gnathologic setup and positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.	
	EF	COTTINGHAM, "Gnathologic clear plastic positioner" <i>Am. J. Orthod.</i> , 55:23-31, 1969.	
	EG	CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairside," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites' The Computer Moves From The Front Desk To The Operator," <i>Canadian Dental Journal</i> , vol. 54(9), (1988), pp. 661-666.	
	EH	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.	
	EI	CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.	
CED	EJ	CURETON, "Correcting malaligned mandibular incisors with removable retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.	
	EK	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.	
	EL	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.	
	EM	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.	
Examiner Signature	Cary E Connor		Date Considered
			3-9-05

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10/632,482	
			Filing Date	August 1, 2003	
			First Named Inventor	PHAN, LOC X.	
			Art Unit	3732	
			Examiner Name	Unassigned	
Sheet	6	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	* Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	EN	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.		
	EO	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 3 pages total.		
	EP	DenTrac Corporation, Dentrac document, pp. 4-13.		
	EQ	DURET et al., "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.		
	ER	DURET et al., "CAD/CAM imaging in dentistry," <i>Current Opinion in Dentistry</i> , Vol. 1 (1991), pp. 150-154.		
	ES	DURET, "The Dental CAD/CAM, General Description of the Project," <i>Hennson International Product Brochure</i> , Jan. 1986., 18 pages total.		
	ET	DURET, "Vers une prothese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.		
	EU	ECONOMIDES, "The Microcomputer in the Orthodontic Office," <i>JCO</i> , (Nov. 1979), pp. 767-772.		
	EV	ELSASSER, "Some observations on the history and uses of the Kesling positioner" <i>Am. J. Orthod.</i> , 36:368-374, 1950.		
	EW	FABER et al., "Computerized interactive orthodontic treatment planning," <i>Am. J. Orthod.</i> , Vol. 73, No. 1 (Jan. 1978), pp. 36-46.		
	EX	FELTON et al., "A computerized analysis of the shape and stability of mandibular arch form," <i>Am. Journal of Orthodontics and Dentofacial Orthopedics</i> , Vol. 92, No. 6 (Dec. 1987), pp. 478-483.		
	EY	FRIEDE et al., "Accuracy of Cephalometric Prediction in Orthognathic Surgery," <i>Abstract of Papers, Journal of Dental Research</i> , Vol. 70 (1987), pp. 754-760.		
	EZ	GIM-ALLDENT Deutschland, "Das DUX System: Die Technik" 4 pages total.		
	FA	GRAYSON, "New Methods for Three Dimensional Analysis of Craniofacial Deformity," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery, AAOMS Sept. 13, 1990, 3 pages total.		
	FB	GUESS et al., "Computer Treatment Estimates in Orthodontics and Orthognathic Surgery," <i>JCO</i> , (April, 1989), pp. 262-28.		
	FC	HEAVEN et al., "Computer-based Image Analysis of Artificial Root Surface Caries," "Automated Identification of Landmarks in Cephalometric Radiographs," <i>Abstracts of Papers, Journal of Dental Research</i> , Vol. 67, March 9-13, 1988, 2 pages total.		

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
--------------------	------------------------	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1448B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete If Known		
			Application Number	10/632,482	
			Filing Date	August 1, 2003	
			First Named Inventor	PHAN, LOC X.	
			Art Unit	3732	
			Examiner Name	Unassigned	
Sheet	7	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	FD	HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary in English, article in German), <i>Informationen</i> , (March 1991), pp. 375-396.		
	FE	HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," <i>AAOMS</i> 1999, p. 96.		
	FF	Inside the ADA, <i>Journal Of The American Dental Assoc.</i> , Vol. 118 (March 1989) 9 pages total.		
	FG	JCO Interviews, "Craig Andreiko, DDS, MS on the Elan and Orthos Systems", JCO, (Aug. 1994), pp. 459-468.		
	FH	JCO Interviews, "Dr. Homer W. Phillips on Computers in Orthodontic Practice, Part 2," JCO, (Dec. 1983), pp. 819-831.		
	FI	JERROLD, "The problem, electronic data transmission and the law," <i>AJO-DO</i> , (Apr. 1988), pp. 478-479.		
	FJ	JONES et al., "An Assessment of the Fit of a Parabolic Curve to Pre- and Post-Treatment Dental Arches," <i>British Journal of Orthodontics</i> , Vol. 16 (1989), pp. 85-93.		
	FK	KAMADA et al., "Case reports on tooth positioners using LTV vinyl silicone rubber" J. Nihon University School of Dentistry, 26(1):11-29, 1984.		
	FL	KAMADA et al., "Construction of tooth positioners with LTV vinyl silicone rubber and some case reports" J. Nihon University School of Dentistry, 24(1):1-27, 1982.		
	FM	KANAZAWA et al., "Three-Dimensional Measurements of the Occlusal Surfaces of Upper Molars in a Dutch Population," <i>J. Dent Res.</i> Vol. 63, No. 11 (Nov. 1984), pp. 1298-1301.		
	FN	KESLING, "Coordinating the predetermined pattern and tooth positioner with conventional treatment" <i>Am. J. Orthod. Oral. Surg.</i> , 32/285-293, 1946.		
	FO	KESLING, "The philosophy of the tooth positioning appliance" <i>Am. J. Orthod. Oral. Surg.</i> , 31(6):297-304, 1945.		
ceo	FP	KLEEMANN et al., "The speed positioner" <i>J. Clin. Orthod.</i> , 30:673-680, 1996.		
	FQ	KURODA et al., "Three-dimensional dental cast analyzing system using laser scanning" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 110:365-369, 1996.		
	FR	LAURENDEAU et al., "A Computer-Vision Technique for the Acquisition and Processing of 3-D Profiles of Dental Imprints: An Application in Orthodontics," <i>IEEE Transactions on Medical Imaging</i> , Vol. 10, No. 3 (Sept. 1991), pp. 453-461.		
	FS	LEINFELDER et al., "A new method for generating ceramic restorations: a CAD-CAM system," <i>Journal Of The American Dental Assoc.</i> , Vol. 118, No. 6 (Jun. 1989), pp. 703-707.		

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
--------------------	------------------------	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known			
		Application Number	10/632,482		
		Filing Date	August 1, 2003		
		First Named Inventor	PHAN, LOC X.		
		Art Unit	3732		
		Examiner Name	Unassigned		
Sheet	8	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	FT	MCNAMARA et al., <i>Orthodontic and Orthopedic Treatment in the Mixed Dentition</i> , Needham Press, January 1993. pp.347-353.	
	FU	MCNAMARA et al., "Invisible Retainers", <i>J. Clinical Orthodontics</i> , (August 1985) pp. 570-578.	
	FV	MOERMANN et al., "Computer Machined Adhesive Porcelain Inlays: Margin Adaptation after Fatigue Stress," IADR Abstract 339, <i>Journal of Dental Research</i> , vol. 66(a) (1987), p. 339.	
	FW	MÖRMANN et al., "Marginal Adaptation von adhasiven Porzellaninlays in vitro," <i>Schweizerische Monatsschrift für Zahnmedizin</i> , Vol. 85 (1985), p. 1118-1129.	
	FX	MÖRMANN et al., "Marginale Adaptation von adhäsiven Porzellaninlays in vitro," Separatdruck aus: <i>Schweiz. Mschr. Zahnmed.</i> , 95: 1118, 1985.	
ced	FY	NAHOUM, "The vacuum formed dental contour appliance" <i>The New York State Dental Journal</i> , 30(9):385-390, Nov. 1964.	
	FZ	NASH, "CEREC CAD/CAM Inlays: Aesthetics and Durability in a Single Appointment," <i>Dentistry Today</i> , (October 1990), pp. 20, 22-23, 54.	
	GA	NISHIYAMA et al., "A new construction of tooth repositioner by LTV vinyl silicone rubber" <i>J. Nihon University School of Dentistry</i> , 19(2):93-102, 1977.	
	GB	PINKHAM, "'Foolish' Concept Propels Technology," <i>Dentist</i> , Jan./Feb. 1989, 3 pages total.	
	GC	PINKHAM, "Inventor's CAD/CAM may transform dentistry," <i>Dentist</i> , Sept. 1990, 3 pages total.	
	GD	PONITZ, Invisible Retainers, 59 <i>Am. J. Orthodontics</i> , March 1971, pp. 266-272.	
	GE	Procera Research Projects, <i>PROCERA Research Projects 1993 — Abstract Collection</i> , 1993, pp. 3-28.	
	GF	REKOW, "A Review of the Developments in Dental CAD/CAM Systems," (contains references to Japanese efforts and content of the papers of particular interest to the clinician are indicated with a one-line summary of their content in the bibliography), <i>Dental Clinics: Prosthodontics and Endodontics</i> , pp.25-33, 1992.	
	GG	REKOW, "CAD/CAM in Dentistry: A Historical Perspective and View of the Future," <i>Journal</i> , Vol. 58 No. 4, (April 1992), pp. 283, 287-288.	
	GH	REKOW, "Computer-Aided Design and Manufacturing in Dentistry: A Review of the State of the Art," <i>The Journal of Prosthetic Dentistry</i> , Vol. 58, No. 4 (Oct. 1987), pp. 512-516.	
	GI	REKOW, "Dental CAD-CAM Systems: What is the State of the Art?" <i>Journal of the American Dental Assoc.</i> , Vol. 122 (1991)/pp. 43-48.	

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
--------------------	------------------------	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete If Known		
			Application Number	10/632,482	
			Filing Date	August 1, 2003	
			First Named Inventor	PHAN, LOC X.	
			Art Unit	3732	
			Examiner Name	Unassigned	
Sheet	9	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	GJ	REKOW, "Feasibility of an Automated System for Production of Dental Restorations," PhD Thesis, Univ. of Minnesota, Nov. 1988, 244 pages total.		
	GK	RICHMOND et al., Research Reports: "The development of a 3D Cast Analysis System," <i>British Journal of Orthodontics</i> , pp. 53-54.		
	GL	RICHMOND, "Recording the dental cast in three dimensions," <i>Am. J. Orthod. Dentofac. Orthop.</i> , Vol. 92, No. 3, (Sept. 1987), pp.199-206.		
	GM	RUDGE, "Dental arch analysis: arch form. A review of the literature," <i>European Journal of Orthodontics</i> , Vol. 3, No. 4 (1981), pp.279-284.		
	GN	SAKUDA et al., "Integrated information-processing system in clinical orthodontics: An approach with use of a computer network system," <i>Am. J. Orthod. Dentofac. Orthop.</i> Vol. 101 No. 3 (March 1992), pp. 210-220.		
	GO	SCHELLHAS et al., "Three-Dimensional Computer Tomography in Maxillofacial Surgical Planning," <i>Arch Otolaryngol Head Neck Surg.</i> Vol. 114 (April 1988), pp. 438-442.		
	GP	SEGÜ et al., "Computer-aided Cephalometry and New Mechanics in Orthodontics" (Article Summary in English, article in German), <i>Fortsch. Kieferorthop.</i> 44, 370-376 (Nr. 5), 1983		
	GQ	SHILLIDAY, "Minimizing finishing problems with the mini-positioner" <i>Am. J. Orthod.</i> 59:596-599, 1971		
	GR	Siemens, "CEREC - Computer-Reconstruction," <i>High Tech In der Zahnmedizin</i> , 14 page total.		
	GS	Sirona Dental Systems GmbH, CEREC 3D, Manuel utilisateur, Version 2.0X (in French), 2003, 114 pages total.		
	GT	STOLL et al., "Computer-aided Technologies in Dentistry" (Article Summary in English, article in German), <i>Dtsch Zahnärztl Z</i> 45, 314-322, 1990.		
	GU	U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 21 pages total.		
	GV	U.S. Department of Commerce, National Technical Information Service, "Holodontology: An Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFB Tex, March 1973, 37 pages total.		
	GW	U.S. Provisional Patent Application No. 60/050342, filed on June 20, 1997, 41 pages total.		
	GX	VAN DER LINDEN et al., "Three-Dimensional Analysis of Dental Casts by Means of the Optocom," <i>J Dent Res</i> , July-August 1972, p. 1101.		
	GY	VAN DER LINDEN, "A New Method to Determine Tooth Positions and Dental Arch Dimensions," July-August 1972, p. 1104.		

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
-----------------------	------------------------	--------------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete If Known		
			Application Number	10/632,482	
			Filing Date	August 1, 2003	
			First Named Inventor	PHAN, LOC X.	
			Art Unit	3732	
Examiner Name	Unassigned				
Sheet	10	of	10	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	GZ	VAN DER ZEL, "Ceramic-fused-to-metal Restorations with a New CAD/CAM System," <i>Quintessence International</i> , vol. 24(11) (1993), pp. 769-778.	
	HA	VARADY et al., "Reverse Engineering of Geometric Models - An Introduction," May 13, 1996, pp. 1-28.	
CEO	HB	WARUNEK et al., "Clinical use of silicone elastomer appliances" <i>JCO</i> , MH (10):694-700, 1989.	
	HC	WARUNEK et al., "Physical and mechanical properties of elastomers in orthodontic positioners" <i>Am. J. Orthod. Dentofac. Orthop.</i> , 95:388-400, 1989.	
	HD	WELLS, "Application of the positioner appliance in orthodontic treatment" <i>Am. J. Orthodont.</i> , 58:351-366, 1970.	
	HE	WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution," <i>Journal of Dental Practice Admin.</i> , Jan./March 1987, pp. 2-5.	
	HF	WILLIAMS, "The Switzerland and Minnesota Developments in CAD/CAM," <i>Journal of Dental Practice Admin.</i> , pp. 50-55, April/June 1987.	
	HG	WISHAN, "New Advances in Personal Computer Applications for Cephalometric Analysis, Growth Prediction, Surgical Treatment Planning and Imaging Processing," <i>Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery</i> , AAOMS, Sept. 13, 1990, p. 5.	
	HH	YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," <i>Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society</i> , Vol. 12, No. 5, pp. 2051-2053, 1990.	
	HI	YAMAMOTO et al., "Optical measurement of dental cast profile and application to analysis of three-dimensional tooth movement in orthodontics," <i>Frontiers in Med. and Biol. Eng'g</i> , Vol. 1, No. 2 (1988), pp. 119-130.	

Examiner Signature	<i>Gay E O'Connor</i>	Date Considered	3-9-05
--------------------	-----------------------	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Page **3** of **3**

Complete if Known

Application Number	10/632,482
Filing Date	August 1, 2003
First Named Inventor	PHAN, LOC X., et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	018563-001130US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
CEO	AA	3,922,788		Lavin	12/1975
CEO	AB	5,011,465 5,044,705		Lemchen	4/1991
CEO	AC	5,957,688		Anthony	8/1999
CEO	AD	5,964,587		Sato	10/1999
CEO	AE	5,971,754		Sondhi et al.	10/1999
CEO	AF	5,975,893		Chisti et al.	11/1999
CEO	AG	6,309,215		Phan et al.	10/2001

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
CEO	AH	WO 98/58598		12/1998		<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS

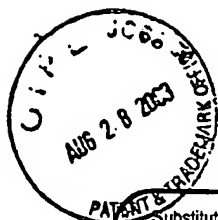
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CEO	AI	Chippone, "Constructing the gnathologic setup and positioner" <i>Journal of Clinical Orthodontics</i> (1980) 14:121-133.	
CEO	AJ	Cottingham, "Gnathologic clear plastic positioner" <i>American Journal of Orthodontics</i> (1969) 55:23-31.	
CEO	AK	Cureton, "Correcting malaligned mandibular incisors with removable retainers" <i>Journal of Clinical Orthodontics</i> (1998) 30:390-395.	
CEO	AL	Kesling et al., "The philosophy of the tooth positioning appliance" <i>American Journal of Orthodontics and Oral Surgery</i> (1945) 31:297-304.	

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
-----------------------	------------------------	--------------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Page **4** of **4**

Complete if Known

Application Number	10/632,482
Filing Date	August 1, 2003
First Named Inventor	PHAN, LOC X., et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	018563-001130US

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)			
CEL	AM				Kesling et al., "Coordinating the predetermined pattern and tooth positioner with conventional treatment" <i>American Journal of Orthodontics and Oral Surgery</i> (1945) 32:285-293.	
CEL	AN				Kleeman et al., "The speed positioner" <i>Journal of Clinical Orthodontics</i> (1996) 30:673-680.	
CEL	AO				Product Brochure, Raintree Essix™, Inc. New Orleans, Louisiana 70125, 7 pages total from http://www/essix.com/magazine/default.html .	
CEL	AP				Product Brochure, Tru-tain Orthodontic & Dental Supplies, Rochester, Minnesota 55902, 16 pages total.	
CEL	AQ				Shilliday, "Minimizing finishing problems with the mini-positioner" <i>American Journal of Orthodontics</i> (1971) 59:598-599.	
CEL	AR				Warunek et al., "Clinical use of silicone elastomer appliances" <i>Journal of Clinical Orthodontics</i> (1989) 23:694-700.	
CEL	AS				Wells, "Application of the positioner appliance in orthodontic treatment" <i>American Journal of Orthodontics</i> (1969) 55:23-31.	

60026535 v1

Examiner Signature	<i>Cary E O'Connor</i>	Date Considered	3-9-05
--------------------	------------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

60026535 v1